DOCUMENT RESUME

ED 360 847 FL 021 425

AUTHOR	Augustin, Marc
TITLE	Higher Achievement and Improvement through Instruction with Computers and Scholarly Transition and Resource Systems Program (Project HAITI STARS). Transitional Bilingual Education 1991-92. OREA Report.
INSTITUTION	New York City Board of Education, Brooklyn, NY. Office of Research, Evaluation, and Assessment.
PUB DATE	7 Jul 92
CONTRACT	T003A80178
NOTE	17p.; For earlier reports, see ED 337 544 and ED 319 248.
AVAILABLE FROM	Office of Research, Evaluation and Assessment, New York City Board of Education, 110 Livingston Street, Room 732, Brooklyn, NY 11201.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Achievement; *Bilingual Education; Career Counseling; *Chinese Americans; Computer Assisted Instruction; Curriculum Development; English (Second Language); *Haitian Creole; High Schools; *High School Students; Language Arts; Limited English Speaking; Native Language Instruction; Parent Participation; Program Evaluation; *Spanish Speaking; Transitional Programs
IDENTIFIERS	New York City Board of Education; *Project HAITI STARS NY

ABSTRACT

Project HAITT STARS (now in its fourth year) was designed to provide Haitian-, Spanish-, and Chinese-speaking high school students of limited English proficiency (who scored at or below the 40th percentile on the Language Assessment Battery) in three schools in Brooklyn and Queens, New York with instruction in the beginning through transitional levels of English-as-a-Second-Language (ESL) and native language arts (NLA) as well as bilingual instruction in the content areas. The project was also to offer computer science classes, personal and career guidance, curriculum and staff development, and parental involvement activities. Of the 413 students who enrolled in the project, 336 participated in both semesters. The project was fully implemented and met its objectives for career counseling, staff and parental involvement, and NLA. The project also supplied data to evaluate objectives for grade retention/referral to special education or curriculum development. The project did not meet its objective for ESL nor did it provide data to evaluate objectives for gifted and talented programs and enrollment in postsecondary education institutions. Recommendations based on the projects' findings are included and data collection and analysis methods and instructional materials are appended. (JP)

ED 360 847

OREA Report

Higher Achievement and Improvement
Through Instruction with Computers and Scholarly
Transition and Resource Systems Program
(Project HAITI STARS)
Transitional Bilingual Education Grant T003A80178
1991-92

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert Tobias
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FL021425

BEST COPY AVAILABLE

NEW YORK CITY BOARD OF EDUCATION

H. Carl McCall
President

Irene H. Impellizzeri
Vice President

Carol A. Gresser
Westina L. Matthews
Michael J. Petrides
Luis O. Reyes
Ninfa Segarra
Members

Keysha Z. McNeil
Student Advisory Member

Joseph A. Fernandez
Chancellor

DIVISION OF STRATEGIC PLANNING/RESEARCH & DEVELOPMENT

Robin Willner
Executive Director

It is the policy of the New York City Board of Education not to discriminate on the basis of race, color, creed, religion, national origin, age, handicapping condition, marital status, sexual orientation, or sex in its educational programs, activities, and employment policies, and to maintain an environment free of sexual harassment, as required by law. Inquiries regarding compliance with appropriate laws may be directed to Mercedes A. Nesfield, Director, Office of Equal Opportunity, 110 Livingston Street, Room 601, Brooklyn, New York 11201, Telephone: (718) 935-3320.

7/92

BEST COPY AVAILABLE

ACKNOWLEDGMENTS

This report has been prepared by the Bilingual, Multicultural, and Early Childhood Evaluation Unit of the Office of Research, Evaluation, and Assessment. Thanks are due to Marc Augustin for collecting the data and writing the report.

Additional copies of this report are available from:

Dr. Tomi Deutsch Berney
Office of Research, Evaluation, and Assessment
New York City Board of Education
110 Livingston Street, Room 732
Brooklyn, NY 11201
(718) 935-3790 FAX (718) 935-5490

FOREWORD

The body of this report is preceded by an Extract which presents an overview of salient points of the project: funding cycle; enrollment figures; background of students served; admission criteria; and programming features, strengths, and limitations, including the outcome of all objectives. The extract also presents the conclusions drawn by the Office of Research, Evaluation, and Assessment (OREA) about the program and its recommendations for program improvement.

The extract is followed by the body of the report, titled Program Assessment. This includes such information as staffing, program implementation, and outcome and implementation objectives. Instructional objectives are presented first, followed by noninstructional objectives. The report then addresses those aspects of programming mandated by Title VII regulations that do not have specifically stated objectives. This may be information on attendance and dropout rate, grade retention, mainstreaming, referrals out of the program to meet special needs of the students, and withdrawals. A case history concludes the report.

Data for this profile were collected and analyzed using a variety of procedures, which are described in Appendix A following the text.

Office of Research, Evaluation, and Assessment
New York City Public Schools

E.S.E.A. Title VII Evaluation Profile

Higher Achievement and Improvement Through Instruction with Computers and Scholarly Transition and Resource Systems Program (Project HAITI STARS)

Transitional Bilingual Education Grant T003A80178
1991-92

EXTRACT

PROJECT DIRECTOR: Ms. Joelle Dufresne

FUNDING CYCLE: Year 4 of 5

SITES

School	Borough	Grade Levels	Enrollment*	
			(fall)	*(spring)*
Sheepshead Bay High School	Brooklyn	9-12	120	123
Andrew Jackson High School	Queens	9-12	118	124
Far Rockaway High School	Queens	9-12	101	119

*The project enrolled 413 students (21 fewer than in the previous year), 336 of whom participated both semesters. Male students numbered 181, female students 199; gender was not stated for 33.

STUDENT BACKGROUND

Native Language	Number of Students
Haitian	136
Spanish	130
Chinese	126
Hindi	5
Other	7
Unreported	9

Country of Origin	Number of Students
Haiti	136
China	89
El Salvador	55
Hong Kong	31
Dominican Republic	26
Puerto Rico	20
India	11
Guatemala	10
Honduras	6
Other	23
Unreported	6

Median Years of Education in Native Country: 9.0; in the United States: 2.0

Percentage of Students Eligible for Free Lunch Program: 89.3

ADMISSION CRITERIA

The project admitted students who scored at or below the 40th percentile on the Language Assessment Battery (LAB) and were recommended by the project's bilingual counselor. Teacher and parent requests were acknowledged. Criterion-Referenced English Syntax Test (CREST) results were used for placement.

PROGRAMMING

Design Features

Project HAITI STARS was designed to provide Haitian-, Spanish-, and Chinese-speaking students of limited English proficiency (LEP) with instruction in the beginning through transitional levels of English as a Second Language (E.S.L.) and Native Language Arts (N.L.A.) as well as bilingual instruction in the content areas. The project also was to offer computer science classes, personal and career guidance, curriculum and staff development, and parental involvement activities.

Capacity building. At the end of the project's Title VII funding, the three schools involved intend to continue the project.

Strengths and Limitations

Project HAITI STARS provided individual attention that allowed students to work at their own pace.

Resource specialists at two sites reported that more staff was needed.

CONCLUSIONS AND RECOMMENDATIONS

Project HAITI STARS was fully implemented. As it had done last year, the project met its objectives for career counseling, staff development, and parental involvement. While it had not met the objective last year, this year the project met its objective for Native Language Arts (N.L.A.). Last year Project HAITI STARS had not supplied data to evaluate objectives for grade retention/referral to special education or curriculum development; this year the project met objectives in those areas. The project met its objective for remedial programs. As it had done last year, the project partially met its objectives for content area subjects and dropout prevention. Last year it fully met its computer science instruction and attendance objectives; this year it partially met them. The project did not meet its objective for E.S.L. although it had met it last year. As had occurred last year, due to lack of sufficient data, OREA could not evaluate objectives for gifted and talented programs/enrollment in post-secondary education institutions. While the project met its objective for staff awareness of pupil needs and problems last year, this year it did not provide the data to evaluate it.

The conclusions, based on the findings of this evaluation, lead to the following recommendations:

- Provide OREA with the necessary data to evaluate all objectives.
- Explore ways of increasing the number of students who have increased their proficiency in English, possibly by offering more individualized instruction.
- Intensify efforts to increase learning in the computer science course.

PROGRAM ASSESSMENT

STAFFING

Title VII Staff (Total 8)

Title	Degree	Language Competencies	Title VII Funding	Other Funding
Project Director	M.S.	Haitian, French	Full time	
Resource Specialist	M.S.	Haitian, French	Full time	
Guidance Counselor	M.S.	Spanish	Part-time	P.C.E.N.
Resource Specialist	M.A.	Chinese	Full time	
Resource Teacher	M.A.	Chinese	Full time	
Paraprofessional	B.A.	Chinese	Full time	
Paraprofessional	A.A.	Spanish	Full time	
Paraprofessional	H.S.	Haitian, French	Full time	

Other Staff Working With Project Students (Total 26)

Title		Degrees		Certification		Language Competencies and Teaching/ Learning Proficiencies (TP/CP)*	
Teacher	25	P.D.	1	E.S.L	16	Spanish	TP 7
Unreported	1	Ph.D.	1	Spanish	4	French	TP 1, CP 1
		M.A.	17	Other	8	Chinese	TP 1
		M.S.	1	Unreported	1		
		B.A.	5				
		Unreported	1				

IMPLEMENTATION AND OUTCOMES (Objectives prefaced by •)

English as a Second Language (E.S.L.)

E.S.L. CLASSES

Sites	Level	Periods Weekly Fall	Periods Weekly Spring
Far Rockaway High School	Beginning	10	10
	Intermediate	10	10
	Advanced	5	5
	Transitional	5	5
Andrew Jackson High School	Beginning	15	15
	Intermediate	10	10
	Advanced	10	10
	Transitional	10	10
Sheepshead Bay High School	Beginning	15	14
	Intermediate	15	15
	Advanced	10	11
	Transitional	10	11

*Teaching Proficiency (TP): Competent to teach in this language.
Communicative Proficiency (CP): Conversational capability only.

Instructional teaching strategies included cooperative learning, staff tutoring, peer tutoring, and teacher-led classes using a text-interpretative approach.

- Seventy-five percent of project students will demonstrate a significant improvement in English language proficiency.

Evaluation Instrument: Language Assessment Battery (LAB)*

Pretest: March 1991; posttest: March 1992.

Number of students for whom pre- and posttest data were reported: 284

Percent of students with pretest/posttest gains: 57.7

Mean gain: 6.7 N.C.E.s (s.d.=9.4)

Mean gain is statistically significant ($t=12.01$, $p<.05$).

Project did not meet E.S.L. objective.

Native Language Arts (N.L.A.)

Students lacking literacy skills in native language (estimated): Spanish 15 percent, Chinese 10 percent, Haitian 75 percent.

N.L.A. CLASSES

High School	Level	Periods Weekly
Far Rockaway	Beginning	5 Spanish
	Intermediate	5 Spanish
	Advanced	5 Spanish
	Advanced Placement	5 Spanish
Andrew Jackson	Intermediate	10 Haitian
Sheepshead Bay	Intermediate	5 Chinese

All N.L.A. classes used computer software to build vocabulary and to improve reading and writing skills in the native language. Teachers used group learning, peer tutoring, individualized training, and hands-on activities as N.L.A. instructional strategies. Teachers and paraprofessionals offered afterschool tutoring, and parents were asked to reinforce study at home.

Students in intermediate Haitian N.L.A. read *La Robe et Le Couteau* by Campbell and Bauer. The advanced class read ***Le Petit Prince*** by St. Exupéry and *Les Jeux Sont Faits* by Jean Paul Sartre.

---

*OREA used a gap reduction design to evaluate the effect of supplementary instruction on project students' performance on the LAB. Since all LEP students in New York City are entitled to such instruction, no valid comparison group exists among these students, and OREA used instead the group on which the LAB was normed. Test scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.06. It is assumed that the norm group has a zero gain in N.C.E.s in the absence of supplementary instruction and that participating students' gains are attributable to project services.

Students in beginning Spanish N.L.A. used *Galería Hispánica* by Adex Albini, and *El cuento* by Crow Dudley. Intermediate Spanish classes used *Cuentítos simpáticos* by Rubin Pfieffer. Advanced students read *Del Solar Hispánico* by A. Del Río.

- **Seventy-five percent of program students will achieve a passing grade of 65 or better in Haitian/French language arts.**

Evaluation Indicator: final course grades.

PASSING GRADES IN NATIVE LANGUAGE ARTS

	Enrollment		Percent Passing	
Language	Fall	Spring	Fall	Spring
Haitian	47	59	89.4	86.4

Project met objective for Haitian/French language arts.

- **Seventy-five percent of Spanish dominant students will demonstrate a significant increase in Spanish language achievement.**

Evaluation Indicator: final course grades.

PASSING GRADES IN NATIVE LANGUAGE ARTS

	Enrollment		Percent Passing	
Language	Fall	Spring	Fall	Spring
Spanish	80	89	92.5	93.3

Project met objective for Spanish students in N.L.A..

The project did not have an objective for Chinese N.L.A.

Content Area Subjects

Project students took bilingual courses in mathematics, science, and social studies. Instructional strategies included the use of videos, cooperative learning, group discussion, and the traditional lecture approach. Teachers also used computers to build students' skills in all three content area subjects. Paraprofessionals were available for individual assistance. Instructional materials are listed in Appendix B.

- **Seventy-five percent of all target students will achieve at least the passing grade of 65 or better in the subject areas of mathematics, social studies, and science.**

Evaluation Indicator: final course grades.

PASSING GRADES IN CONTENT AREA COURSES

High School	Subject	Fall		Spring	
		Enrollment	Percent Passing	Enrollment	Percent Passing
Sheepshead Bay	Mathematics	96	95.8	100	88.0
	Science	94	86.2	93	83.9
	Social Studies	101	95.0	114	93.9
Andrew Jackson	Mathematics	42	73.8	43	65.1
	Science	49	67.3	60	75.0
	Social Studies	43	83.7	51	84.3
Far Rockaway	Mathematics	96	50.0	115	52.2
	Science	84	83.3	97	81.4
	Social Studies	89	88.8	107	89.7

The objective was met in all courses at Sheepshead Bay High School. At Andrew Jackson High School, the objective was met for social studies both semesters, and science in the spring but not in the fall. It did not meet the objective for mathematics although it came very close in the fall. At Far Rockaway High School, the objective was met for science and social studies in both semesters, but not for mathematics in either semester.

Project partially met content area objective.

Computer Science Instruction

Computer resource centers were installed at all three sites and all had a good supply of software programs. The instructional materials used are listed in Appendix B.

- Seventy-five percent of program students will show significant gains in computer science (Basic language and/or COBOL) and achieve a passing grade of 65 or better.

Evaluation Indicator: final course grades.

Twenty-five students enrolled in the fall semester, and 88 percent of these students passed; 23 enrolled in spring, and 73.9 percent of these students passed.

Project met computer science objective during the fall semester and came very close to meeting it in spring.

Career Counseling

- All program students will meet the Guidance Counselor on an individual basis for advisement at least two times during the school year for career orientation and planning.

Evaluation Indicator: program records.

The project director reported that all program students met with the guidance counselor on an individual basis at least two times during the school year for career orientation and planning.

Project met career counseling objective.

Other Activities

The program held cultural and career-related field trips and career fairs. All three sites published a yearly magazine. Far Rockaway High School also published a monthly bilingual project newsletter.

Attendance

- Program students' attendance rate will be 10 percent greater than mainstream students'.

Evaluation Indicator: attendance records.

ATTENDANCE RATES

High School	Project Students	Mainstream Students	Difference
Sheepshead Bay	95.2	82.1	16.0*
Andrew Jackson	98.8	80.3	23.0*
Far Rockaway	89.7	82.8	8.3*

*$p < .05$

Project met attendance objective at two sites and came very close to meeting it at the third.

Dropout Prevention

- The dropout rate of the students will be less than mainstream students.

Evaluation Indicator: school records.

DROPOUT RATES

High School	Project Students	Mainstream Students	Difference
Sheepshead Bay	0.0	4.1	-4.1
Andrew Jackson	0.7	5.0	-4.3
Far Rockaway	12.9	5.0	7.9

Although the dropout rate at Far Rockaway High School decreased 15.4 percent from the previous year, it continued to be much higher than the mainstream rate, which allowed Project HAITI STARS to only partially meet the objective.

Project partially met objective for dropout prevention.

Student Grade Retention/Placement in Special Education Classes

Students considered in need of special education were referred by their teachers to the School-based Support Team (S.B.S.T.) for interviewing and testing. The S.B.S.T. at one of the sites had a team member who spoke the project students' native language. At the two other sites, the resource specialists spoke the project students' native languages and were available to assist in evaluations. The team considered numerous factors when evaluating a student, including background, attitude, and test results.

- Students' grade retention and referral to or placement in special education classes rate will be 10 percent less than mainstream students.

Evaluation Indicator: school records.

PROJECT STUDENTS' RATES

High School	Grade Retention	Referral to Special Education
Sheepshead Bay	0.8	0.0
Andrew Jackson	0.0	0.0
Far Rockaway	0.0	0.0

As in the previous year, project did not provide mainstream figures. However, the zero referral rates could not be improved upon and the grade retention rate for Sheepshead Bay High School was lower than the usual school retention rate and far lower than last year's 21.8 percent.

Project met grade retention/special education objective.

Gifted and Talented Programs/Enrollment in Post-Secondary Education Institutions

- Placement in programs for the gifted and talented and enrollment in post-secondary education institutions will be 10 percent greater than that of mainstream students.

Evaluation Indicator: school records.

The project did not refer any students to gifted and talented programs nor were any mainstream figures submitted to OREA for assessment. This was true in the previous year also.

OREA could not evaluate objective for referral to gifted and talented programs/enrollment in post-secondary education institutions.

Remedial Programs

- The rate of referral to special programs, e.g., P.C.E.N. remedial programs, will be 10 percent less than mainstream students.

Evaluation Indicator: school records.

The project did not refer any students to remedial programs nor were any data submitted for mainstream students. However, the zero referral rated could not be improved upon.

Project met remedial programs objective.

Mainstreaming

Project HAITI STARS mainstreamed two students (0.5 percent of participants), one student less than in the previous year.

Academic achievement of former project students in mainstream. Data were not submitted on any former program participants.

Staff Development

- Ninety percent of program staff will demonstrate professional growth by passing and completing courses of study and by attending in-service training sessions.

Evaluation Indicator: program records.

The project director reported that 90 percent of all program staff completed courses of study and attended in-service training sessions.

Project met staff development objective.

Staff Awareness of Pupil Needs and Problems

- Eighty-five percent of staff will show an increase in awareness of pupil needs and pupil problems.

Evaluation Instrument: OREA-developed 5-point Likert scale.

The project did not provide this data, although it met this objective in the previous year.

OREA could not assess objective for staff awareness of pupil needs and problems.

Curriculum Development

- Four instructional guides in the areas of mathematics, science, social studies, native language arts, and computer science in the native language will be developed.

- The curriculum specialists will develop four additional interdisciplinary subject matter curriculum guides for teaching science and social studies in the native language.

Evaluation Indicator: program inventory.

Instructional guides for mathematics, science, social studies, native language arts, and computer science were developed. Curriculum specialists were hired to develop additional interdisciplinary curriculum guides for teaching science and social studies in the native languages of the students.

Project met both curriculum development objectives.

Parental Involvement

All three schools had a bilingual Parents Advisory Committee (PAC), and parents were heavily involved in meetings, open school days, classroom visits, and bilingual conferences.

- Program students' parents will demonstrate 10 percent more involvement than parents of mainstream students.

Evaluation Indicator: project records.

Attendance of program parents at parent activities was over 10 percent higher than was the attendance of mainstream parents at all three sites.

Project met parental involvement objective.

CASE HISTORY

Project did not provide a case history.

APPENDIX A

DATA COLLECTION AND ANALYSIS

COLLECTION

OREA evaluation consultants visit sites and interview key personnel. The project director gathers data and, with the consultant, completes forms (as shown below) as necessary.

Student Data Form

This one-page form is filled out by staff for each participating and mainstreamed student. OREA gathers data from this form on backgrounds, demographics, academic outcomes, attendance, referrals, and exit from the program.

Project Director's Questionnaire

The Project Director's Questionnaire includes questions on staff qualifications, program implementation, periods of instruction, and instructional materials and techniques.

Project Director's Interview

The interview gathers information on program and student or staff characteristics not supplied by the Project Director's Questionnaire. The interview also allows project staff to offer qualitative data or amplify responses to the questionnaire.

Citywide Test Scores

OREA retrieves scores centrally from the Language Assessment Battery (LAB) and other citywide tests. For evaluation purposes, these test scores are reported in Normal Curve Equivalents (N.C.E.s). N.C.E.s are normalized standard scores with a mean of 50 and a standard deviation (s.d.) of 21.06. They constitute an equal-interval scale in which the distance is the same between any two adjacent scores. A gain of 5 N.C.E.s is the same whether it is at the lower or the higher end of the scale. N.C.E.s can be used in arithmetic computations to indicate group progress. (Percentile scales, although more familiar to many, are unsuitable for such computations since they are not equal-interval.)

Likert-Type Surveys

Likert-type surveys, in which respondents mark their opinions on a scale from one to five, are used in a variety of ways. They examine student attitudes (i.e., toward school and career, native language use, and native and mainstream cultures). They also assess staff and parent attitude and reactions to workshops and other activities.

ANALYSIS

Gap Reduction Evaluation Design

OREA uses a gap reduction design for measuring changes in standardized tests. Since no appropriate non-project comparison group is available in New York City, where all students of limited English proficiency (LEP) are entitled to receive supplementary services, OREA compares the progress of participating students with that of the group on which the test was normed. It is assumed that the norm group would show a zero gain in the absence of instruction, and gains made by project students could be

attributed to project services. Scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.06. (See "Citywide Test Scores" above.)

To test whether pre/posttest gains are greater than could be expected by chance alone, OREA uses a *t*-test. To test whether a difference between two proportions (e.g., program and mainstream attendance rates) is greater than could be expected by chance, OREA uses a *z*-test and reports the differences between the two proportions. The level of significance is set at .05 for all tests.

Techniques For Minimizing Error

The evaluation procedures minimize error by providing for proper administration of evaluation instruments through a combination of testing at 12-month intervals, appropriate analysis procedures and reporting.

Instruments of measurement include the LAB (see above), the Degrees of Reading Power (D.R.P.) test, the Metropolitan Achievement Test--Mathematics (MAT-Math), El Examen de Lectura en Español (ELE), Likert-type scales (see above), and project-developed tests. Except for Likert scales and project-developed tests, these instruments are scored on a citywide basis at the Scan Center of the New York City Public Schools.

APPENDIX B

INSTRUCTIONAL MATERIALS

E.S.L.

Apple IIC and Tandy 1000 Computers
Franklin Computers (speaking dictionary companion)
Typewriters, video and audio cassette recorders

Grammar in Action	Newbury House and Co.
English Step by Step	Regents
Great American Story	Prentice Hall, Regents
Real Stories	

N.L.A.

Chinese Language Arts (vol. III)	Lesley College
Galería Hispánica	McGraw-Hill Book Co.
El Cuento	Holt, Rinehart & Winston
Aventuras de Don Quijote	Princeton University Press
La Robe et le Couteau	
Les Jeux Sont Faits	

Content Areas

Integrated Mathematics	Dresler & Keenan
Repaso matemático	Allyn and Bacon Inc.
Achieving Competence in Mathematics	Amsco
Biology	Allyn & Bacon
Chinese Supplementary Text for Biology	Seward Park High School
Introducción a las Ciencias Biológicas	M. Fernandez & Cia
Physical Science	Prentice Hall
China (History, Culture, People)	Globe Book Co. Inc.
Exploring World History	Globe Book Co. Inc.
Comprende tu Mundo	Jarret Publishing
Historia de los E.E.U.U.	Minerva Books, Ltd